

National Bee-Keepers' Convention at Chicago, Dec. 19-21

AMERICAN BEE JOURNAL

45th Year

CHICAGO, ILL., DECEMBER 7, 1905

No. 49



Mr. Chas. Clarke and Apiary, Located in Cook Co., Ill., (Mr. Clarke's Father and Mother Standing Near the House)
(See page 839)

THE AMERICAN BEE JOURNAL

PUBLISHED WEEKLY BY

GEORGE W. YORK & COMPANY

334 Dearborn Street, Chicago, Ill.

IMPORTANT NOTICES

THE SUBSCRIPTION PRICE of this Journal is \$1.00 a year, in the United States, Canada, and Mexico; all other countries in the Postal Union, 50 cents a year extra for postage. Sample copy free.

THE WRAPPER-LABEL DATE indicates the end of the month to which your subscription is paid. For instance, "dec 5" on your label shows that it is paid to the end of December.

SUBSCRIPTION RECEIPTS.—We do not send a receipt for money sent us to pay subscription, but change the date on your wrapper-label, which shows that the money has been received and credited.

ADVERTISING RATES will be given upon application.

National Bee-Keepers' Association

Objects of the Association

- 1st.—To promote the interests of its members.
- 2d.—To protect and defend its members in their lawful rights.
- 3d.—To enforce laws against the adulteration of honey.

Annual Membership Dues, \$1.00

General Manager and Treasurer—N. E. FRANCE, Platteville, Wis.

If more convenient, Dues may be sent to the publishers of the American Bee Journal.

The Honey-Producers' League

(INCORPORATED)

OBJECTS:

1. To create a larger demand for honey through advertising.
2. To publish facts about honey, and counteract misrepresentations of the same.

MEMBERSHIP DUES

1. Any bee-keeper may become a member by paying to the Manager an annual fee of \$1.00 for each 20 (or fraction of 20) colonies of bees (spring count) he owns or operates.
2. Any honey-dealer, bee-supply dealer, bee-supply manufacturer, bee-paper publisher, or any other firm or individual, may become a member on the annual payment of a fee of \$10, increased by one-fifth of one (1) percent of his or its capital used in the allied interests of bee-keeping.

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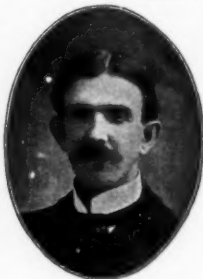
Made of artificial stone. Practically indestructible, and giving entirely satisfactory results. Comb foundation made easily and quickly at less than half the cost of buying from the dealers. Price of Press, \$1.50—cash with order. Address,

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J. G. Goodner, of this State, writes me that he "prefers to pay \$25 for a Rietsche Press than do without it."—A. G.

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when writing advertisers.

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Bee-Supplies bought NOW are subject to a generous discount from our regular low prices. We do this to keep our factory busy. Send us a list of what you need and we will make you a price by return mail that will convince you.

If you want a catalog that is more than a price-list—that contains valuable information on bee-keeping—you must hurry to have your name placed on our mailing-list. Only a limited number will be printed. It's free, of course.

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When attending the National Bee-Keepers' Convention at Chicago, Dec. 19, 20, 21

COME AND INSPECT

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Medium Brood	.55	.53	.51	.49	.48
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Thin Surplus	.62	.60	.58	.56	.55
Extra Thin Surplus	.65	.63	.61	.59	.58

DISCOUNTS for Early Cash Orders

During September	10 percent
" October	9 "
" November	8 "
" December	7 "
" January	6 "
" February	4 "
" March	2 "

Beeswax Wanted at all Times.



DADANT & SONS, Hamilton, Ill.

BEE-SUPPLIES

Everything the bee-keeper needs. Distributing house for Lewis' Goods at Factory Prices. Now is the time to buy for next season.

**Cash Orders for regular Supplies before January,
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FINE EXTRACTED HONEY in cans or barrels. The best the world can produce. Samples 8 cents, to pay postage and packing. How much can you use? Prices quoted quick on the quantity you mention.

We buy **BEESWAX** at all times in the year. Send for our Catalog and "Special"—free.

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Southwestern Bee Co., 438 W. Houston St., San Antonio, Tex.

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Why not get a New Subscriber for the American Bee Journal, to send with your own renewal?

If you want the Bee-Book

That covers the whole Apicultural Field more completely than any other published, send \$1.20 to

Prof. A. J. Cook, Claremont, Cal.,

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"Bee-Keeper's Guide."

Liberal Discounts to the Trade.

Bee-Keepers' Early Discounts

Now is the Time to send in your order for goods for use next season, and for all orders where cash accompanies we allow the following discounts:

Before October 1	deduct 10 percent
" November 1	" 9 "
" December 1	" 8 "
" January 1	" 7 "
" February 1	" 6 "
" March 1	" 4 "
" April 1	" 2 "

Freight-Rates from Toledo are the lowest. Can take Honey and Beeswax in exchange for Supplies if you desire. Send for free illustrated Catalog. It describes and illustrates everything for both the Poultry and Bee Keepers.

GRIGGS BROS.

521 Monroe Street,

TOLEDO, OHIO.

Mention Bee Journal when writing.

For 1906

Gleanings in Bee Culture for 1906

Our excellent staff of contributors will be maintained, and many splendid special articles will be published.

Half-Tone Illustrations

During the past summer we have had a special artist to take photographs for us. He has traveled on our account alone the past summer over 4000 miles, and we can promise some very fine pictures. Many of the Second Prize Photo Contest, American and Foreign, will appear soon. Our engravings are made by the very finest engravers in the United States. Just this wealth of illustration doubles the value of the paper.

Advertisements

Gleanings prides itself on the clean class of advertisements it carries. Its subscribers show their appreciation of the fact by their liberally patronizing them. There is no better medium in the United States for those catering to the needs of the bee-keeper. We now print 25,000 copies and yet with our special edition (Dec. 15, 40,000) our old rates hold good which were based on 20,000 circulation. Gleanings gives its subscribers and advertisers full measure, pressed down and running over.

Subscription Rates

With all those improvements the price will be the same—\$1.00 per year. We make a special rate of 6 months trial for 25 cents to those who have never taken Gleanings. You will find Gleanings listed in all principal club offers. We make many special inducements. In fact, we are just waiting for YOU to do your part.

Our Bees and Queens

We are running at Medina and vicinity 5 queen-rearing yards, at other points 3 more. We are prepared to furnish our celebrated Red Clover stock, a stock that won a splendid reputation for gathering honey from any source. We are also prepared to furnish bees in nuclei and full colonies.

We are bending every effort to make Gleanings the best bee-paper ever issued. 1906 will be the banner year in our history. Beginning with the Christmas number a great change will take place. Frequent new cover designs. New department headings. Better paper. Better printing. More pages.

Root's Goods for 1906

In the matter of improvements it is generally conceded that we are the leaders. We are constantly testing out every new device in our own yards and when it has stood the test we place it before the public.

Our Supplies for this year are of the same quality and standard of workmanship that has characterized our lines of previous years. Our motto is: "Not how much, but how good."

Our Hives and Sections

Our hives and equipment, both for workmanship and clearness of stock, cannot be excelled and we doubt if they have ever been equaled. So strong is the demand for these goods that there has been a strife in many cases among dealers to get the Root Company's lines because they knew that everything that bears the Root brand is always popular with the customer and always the best that money and brains can produce.

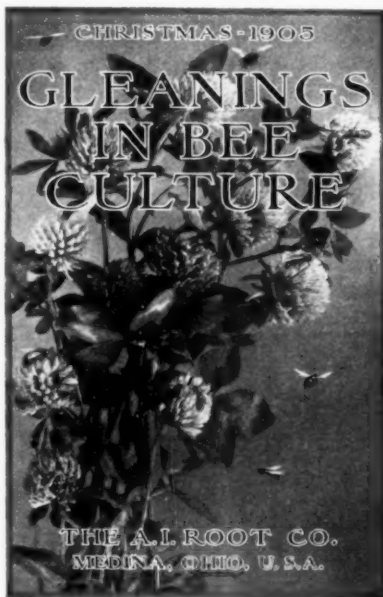
Our sections and frames for 1906 are even better than ever. They are inspected and re-inspected and each inspector is required to put in each box of sections that he passes upon his own inspector's card so that if complaint is made this card will come back on him. As he is anxious to hold his position and if possible get an increase in pay, it is clearly to his interest as well as that of the customer to let nothing but perfect goods pass.

The Root Automatic Extractors

Our extractors for 1906 in point of improvements and quality of workmanship leaves everything else in the shade. The 4, 6 and 8 frame machines have the finest automatic reversing mechanism that has ever been put into a machine. Even the two-frame models can have the reversing mechanism put on at a slight additional cost; but we do not ordinarily advise buying the two-frame automatic. Steel construction has been substituted for cast-iron wherever practicable.

Our Catalog for 1906

It will be a great improvement. A pleasing new cover design. Entirely revised and rewritten. Many new illustrations. The new arrangement of matter will be especially welcome by many. Every thing is classified. All Bodies, Supers, etc., together. The prices are under each article described and illustrated, thus doing away with price-tables. Beginning Dec. 15 our catalog goes on the press for the first run of a solid 3 weeks, day and night. If you want a copy of this first edition let us have your name at once.



THE A. I. ROOT COMPANY

Medina, Ohio



144 Erie St., Chicago

10 Vine St., Philadelphia

44 Vesey St., New York

ESTABLISHED IN 1861 THE AMERICAN OLDEST BEE-PAPER IN AMERICA

BEE JOURNAL

(Entered at the Post-Office at Chicago as Second-Class Mail-Matter)

Published Weekly at \$1.00 a Year by George W. York & Co., 334 Dearborn St.

GEORGE W. YORK, Editor

CHICAGO, ILL., DECEMBER 7, 1905

Vol. XLV—No. 49



Editorial Notes and Comments

Mice in Bee-Hives in Winter

A mouse will do a lot of mischief in a hive in winter. Not so much the amount of honey eaten, but the tearing down of beautiful worker-combs. Neither would the holes made in the combs count for so much if the bees would fill them up again with worker-comb; but they're just about sure to fill them up with drone-comb. To be sure, the bee-keeper can put in patches of worker-comb, either before or after the bees have filled the holes with drone-comb, but it is a troublesome thing, and so many other things are to be done that it is likely to be neglected, and many a pound less of honey is secured in the harvest because of the honey used in rearing useless drones, and the honey they consume after they are reared.

Plenty of cats will help, and in the cellar traps and poison may be used. In any case, whether in cellar or outdoors, one thing may be done that acts by way of prevention, and indirectly by way of cure. It is to have the hive-entrances mouse-tight. Close them with wire-cloth three meshes to the inch, and they are just as open as ever for the bees, but closed to the mice. Of course you may fasten a mouse in a hive by doing so; but that is better than letting him have the free run of the hive. Most of the time the bees are so nearly dormant that a mouse is monarch of all he surveys; then comes a time of stirring up, and Mr. Mouse runs out of the hive to get out of the way, only to return or enter some other hive when matters settle down. But if the entrance is closed he can not get out of the way, and the bees make it so hot for him that in spring you will find a dead mouse in the hive.

Missouri Bee-Keepers Waking Up

We have received from Robt. A. Holekamp, Secretary of the Missouri State Bee-Keepers' Association, 4263 Virginia Ave., St. Louis, Mo., some printed matter which has been prepared by him and issued by the Missouri State Board of Agriculture especially for circulation among the bee-keepers of Missouri. It is Mr. Holekamp's aim to keep up this kind of propaganda among the bee-keepers in the

hope that it may induce many who are now using box-hives to become modern, progressive bee-keepers.

The 16-page bulletin contains much valuable information for the bee-keepers of Missouri. Much space is devoted to the treatment of foul brood. The bulletin is illustrated, and should create much interest in bee-keeping in that great and growing State. A copy can be had by applying to Geo. B. Ellis, Secretary of the Missouri State Board of Agriculture, Columbia, Mo.

It is the intention of the Missouri State Bee-Keepers' Association to present a Bill before the next Legislature, providing for inspectors of apiaries; also a Bill providing a heavier penalty for the sale of any article under the name of honey which is not the unadulterated product of the honey-bee.

Every member of the State Association is asked to consider himself a committee of one to form a bee-keepers' club in his county. There is such a club in St. Louis, which has 27 members. Of course, every club member is also a member of the State Bee-Keepers' Association. Monthly club meetings are held. It is expected that not only will the production of honey be stimulated by such clubs, but that the consumption of honey will also be increased.

A larger income is needed by the Association to carry on the work already planned. Taking it all together, the Missouri bee-keepers seem to have made a good start along the line of improving their organization. Much of this is doubtless due to the activity of Mr. Holekamp, who seems to be a tireless worker for the greater progress and prosperity of all the bee-keepers of Missouri.

"Disagreeable Peculiarities" of "Best" Bees

The subject of black bees vs. Italians seems to be up for discussion again, and as on most subjects each side has its advocates. One of our anti-black readers sends this comment on a remark made by "Afterthinker" Hasty:

MR. EDITOR:—On page 795, I find the following written by the man who thinks after:

"One may refuse to keep certain bees because of disagreeable peculiarities, and at the same time claim that they are really the best bees."

I wonder if Mr. Hasty would have written that if he had done his thinking before writing in place of after. There may, however, be another way of accounting for it. Our "Afterthinker" lives in Ohio, and somewhere in the neighborhood of the time in which that was written there was a very exciting election, and the friends of one Herrick were offering drinks at marked-down prices. Can it be that our usually wary "Afterthinker," temporarily persuaded by bargains in tanglefoot, should have imbibed so much

that his beclouded brain could not discern that "peculiarities," whether "disagreeable" or otherwise, are among the things that can not be counted out in taking an inventory of the qualities that go to make up the character of a bee? If I understand him correctly, he says:

"Blacks are the best bees, but I refuse to keep them because of a disagreeable peculiarity in their style of running when handled." To which I reply, "Yes, blacks are really the best bees, but they have the disagreeable peculiarity that they don't put up as good a fight against robbers and moths as do Italians and hybrids; also that they don't store as much honey as others, and a few other little peculiarities which make me refuse to keep them, although they are really the best bees." ANTI-BLACK.

Width of Sections in England

In this country $1\frac{1}{4}$ inches prevails, in England probably 2 inches. At a meeting of the British Bee-Keepers' Association, reported in the British Bee Journal, the question of adopting a standard width came up. After an animated discussion, the resolution in the following form, "That it is desirable, in the opinion of this meeting, that there should be a standard section recognized by the British Bee-Keepers' Association, namely, $4\frac{1}{4} \times 4\frac{1}{4} \times 2$ inches," was submitted to the meeting, and carried by a majority of seven.

Fastening Foundation in Frames

In this country saw-kerfs to receive foundation in top-bars are generally made only in top-bars $\frac{1}{2}$ an inch thick or thicker, the kerf being only $\frac{1}{4}$ inch deep, and not materially affecting the strength of the top-bar. In England top-bars $\frac{3}{8}$ thick are sawed entirely in two, and complaint is made that the top-bar is thus weakened to the extent of 10 percent. But this gives opportunity for a special plan of fastening thus given in the British Bee Journal:

"My own simple plan is to press the top edge of the sheet between my thumb and forefinger; when thus flattened the foundation slips easily into the saw-cut, and is pushed so far through as to project slightly on the upper side of the top-bar, then run a hot poker along the projecting edge, and the sheet of wax is made perfectly secure."



Miscellaneous News & Items

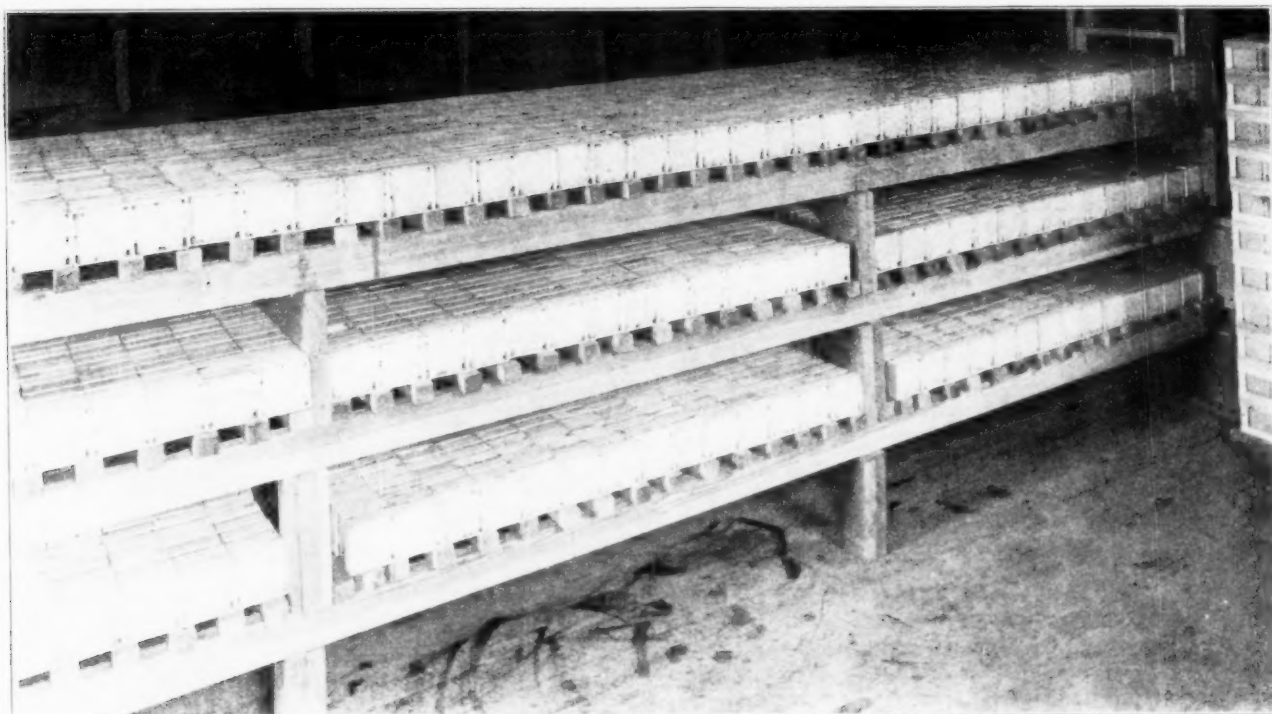
Canadian Beedom is a new department of the American Bee Journal this week—or, rather, an old department revived—with Mr. Morley Pettit as conductor, or editor. Mr. Pettit is well known to bee-keepers of Canada, although one of the younger generation of bee-folks. His crop, the past season, was 40,000 pounds of extracted honey. Having produced that amount in one season in Canada should give him the right to speak on bee-culture with at least some authority.

We trust that our Canadian readers will help Mr. Pettit to make their department as interesting and valuable as possible.

A 20-Page Number is this week's American Bee Journal. It is our expectation to make it a 20-page paper from now until July 1, 1906, and then 16 pages until Dec. 1. This plan is begun on account of the extra advertising patronage and also extra demand for general reading space during the first six months of the year. Also, from July 1 to Dec. 1 most bee-keepers are very busy with work aside from bee-keeping, so that they have scarcely time to read so much bee-literature.

By the way, the extra pages each week are furnished at no extra charge to the subscribers. We are pretty familiar with the current bee-literature of the day, and, really, we think it would be rather difficult to find a bigger and better dollar's worth of apiarian information than we give in 52 copies of the Weekly American Bee Journal each year.

The Apiary of Chas. Clarke, of Chicago, Ill., appears on the first page this week. The year after the Chicago fire the Clarkes located and built at Washington Heights



Some 3000 or 4000 pounds of Mr. Clarke's 1905 Honey Crop, as it appeared in his Honey-House.

The sons have grown up on the old homestead, one a school teacher, one a member of the Board of Trade, and the third the cashier for a large candy company and also a bee-keeper known to many in Chicago. The parents have had a wedded life of 53 years. Mr. Clarke, Sr., has been honored by reappointment as judge in Chicago four successive terms of four years each, and never had a case reversed by the higher courts. He was a professor of geology in the old Chicago University, and an active member of various literary and scientific societies.

Mr. Chas. Clarke has a great many visitors from the kindergarten schools, and his bees have always been on their good behavior when the children are around, and have never stung any of them.

Mr. Clarke is a firm believer in racking up honey in a hot room, for 30 to 40 days, when having any sweet clover in it, as his honey-room will show by the picture herewith.

He is a crank on foul brood, and willing to prove at any time the responsibility of the queen for same. He commenced with 2 colonies in 1895, and his bees had the first dose of foul brood that summer. The third year saw him with 8 colonies, and 7 out of 8 took the disease, which taught him a valuable lesson.

Mr. Clarke generally doubles up his apiary to 50 or 60 colonies in fall.

He is engaged all day at the office, but always finds time to have a good flower-garden, and values highly the reputation of having well-behaved bees by neighbors 50 feet away, never having had a complaint.

Mr. C. imports his own breeding queens, and tries at all times to have quiet stock and good honey-cappers, as he runs for comb honey only, and always marks a hive where the capping is poor, so that he can change the queen, as poor capping for him makes 3 cents a pound difference on the honey. He has seen some poor crops, and has fed up to July 1, and also has had good crops, averaging one year 182 pounds per colony, spring count, and allowed only a very small increase.

Mr. Clarke's family came from a long line of ancestry. The loom for weaving silks is named from his mother's family. It was invented by Sir John Loomes. Mrs. Clarke has in her possession specimens of brocaded silk 200 years old, of great value. The first steam plow was invented by his mother's brother. Mr. Clarke, Sr., came from old intellectual stock, his uncle, Archdeacon Clarke being, as a young man, tutor to the King of Hayti, and latterly Archdeacon of Antiqua, of the West Indies.

Mr. Chas. Clarke, the bee-keeper, has never married, but lives with his aged and honored parents at the lovely old home shown in the first-page picture.

"Eggstra"—Good Eggs are what we received recently—several dozen of them—from Mrs. Dr. C. C. Miller, of Marengo, Ill. When we arrived home one evening we found that quite a large box had come to our house by express. Mrs. York had taken it in, and insisted that we open it before supper, to see what it contained. (A woman's curiosity is simply wonderful, isn't it?) We did so, and there were over 5 dozen of just the finest, largest, brownest hens'-eggs you ever saw. It seemed like Easter-time when we lived on the farm and used to hide eggs in the granary or barn, and then bring them in on Easter morning. But those Marengo eggs are fine, and greatly appreciated by "ye editor" and his good "frau." Thank you, Mrs. Miller.

Amerikanische Bienenzucht, by Hans Buschbauer, is a bee-keeper's handbook of 138 pages, which is just what our German friends will want. It is fully illustrated, and neatly bound in cloth. Price, postpaid, \$1.00; or with the American Bee Journal one year—both for \$1.75. Address all orders to this office.

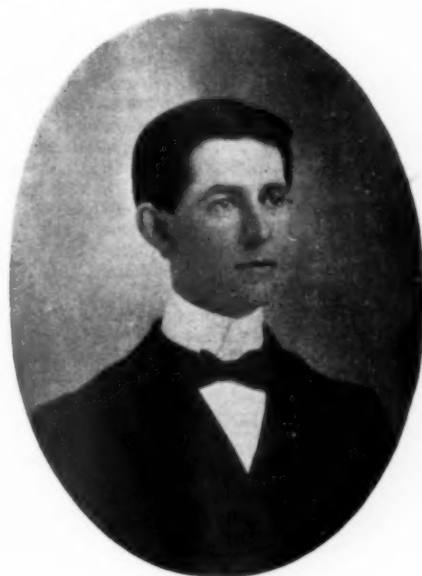


Canadian Beedom

Conducted by MORLEY PETTIT, Villa Nova, Ont.

A Department for Canadians

It is with pleasure that I am undertaking, at the request of "Ye Editor-in-Chief," to say something weekly to Canadian bee-keepers about themselves, and to others about Canadian bee-keeping. We have not the sunny climate of the South in our beloved country—"Our Lady of the Snows"—but we have the sunshine just the same, and we have, what is more than that, the clear, bracing winter air



MORLEY PETTIT

which clears the brain and sets the blood coursing through the veins in a most exhilarating manner. Further than that, it frees the land for a time of insect pests which thrive in the South during 12 months in the year.

Foul Brood Inspection

Ontario bee-keepers are said to have the best foul brood law in existence; but we are not satisfied, as the Hon. Nelson Monteith, Minister of Agriculture, said in addressing the convention, if we considered we had attained an ideal we should make no further progress. To attain the highest good one must not be satisfied, nor dissatisfied, but *unsatisfied*. Ontario bee-keepers are thus with regard to the Foul Brood Act. We feel fairly sure that we have the most skillful inspector that can be found, but the work is too great for him. Accordingly, a resolution was put through the convention, asking the Minister of Agriculture to pass, at the coming session of the Ontario Legislature, amendments to the Foul Brood Act, whereby the Province shall be divided into three districts, with three inspectors, one to reside in each district. This is to come in force at the next annual convention, and in the meantime the old inspector holds office.

Canadian Bee-Keepers in Jamaica

Speaking of the South, suggests Jamaica—that bee-keepers' paradise—to which several of our prominent bee-keepers were looking for an escape from the long period in which Canadians are deprived of the pleasure of seeing bees fly and gather nectar. Great stories had become current of

300 pound averages, delightful climate, and the like, until Arthur Laing of Hamilton, R. H. Smith of St. Thomas, and Jacob Alpaugh of Galt, could resist no longer, but made the venture of the trip last winter. The rest of us—more cautious—are now reaping the benefit of their experience. At the Ontario bee-keepers' convention in Toronto, Nov. 15 to 17, Mr. Laing gave his experience.

The advantages of Jamaica bee-keeping, as set forth by Mr. Laing, are principally cheap labor—wages being about 25 cents per day, without board. On the other hand are expensive and inadequate transportation, starvation period during several months in which bees steadily dwindle and fall a prey to the ravages of moths and ants; honey prices about 2½ cents per pound, and an average yield of 25 pounds per colony.

Mr. Laing also mentioned confidentially, fleas, and, if my memory serves me rightly, land crabs, ticks, scorpions, lizards, and other household pets too numerous to mention. In fact, all considered, it was quite evident Mr. Laing came away with a bad impression of Jamaica for bee-keeping.

Ventilating Hives

It is pretty well established that large hive-entrances are the thing in the honey season; but not so many will admit, or have ever thought of the advantage of super ventilation. I can not remember when my father, S. T. Pettit, did not put 3 or 4 strips ⅜-inch square and about 4 inches long lengthwise on the back end of 3 or 4 top-bars in the extracting super. They projected ½ inch, and held up the back edge of the quilt and cushion to admit air to the super in hot weather. That was one of the things I could not get around at first when changing from cushion and gable cover to the flat cover packed with felt paper, which is so much more convenient in migratory bee-keeping.

R. F. Holtermann suggested to me a saw-cut about ⅜-inch wide and 3 or 4 inches long in the back of the super a couple of inches down from the top. It is fitted with a galvanized-iron slide for closing in cool weather, and for moving. The bees never use it for an entrance except when the queen gets into the super, and it is certainly a great help in controlling swarming.

Report of the Middlesex Convention

The annual meeting of the Middlesex Bee-Keepers' Association was held in London, Nov. 4. Those present reported a very good season, an average of about 75 pounds per colony, spring count, mostly extracted honey. One member reported 228 pounds of extracted honey from one colony, and 196 sections from a single colony, and neither of these offered to swarm.

Mr. R. H. Smith read an instructive paper on, "Shall We Keep More Bees or Manage those We Have to Better Advantage?" He advocated the latter plan of caring for those we have rather than increasing the number of colonies and decreasing the amount of surplus honey per colony.

Mr. Miller read an interesting paper on "Managing Out-Apiaries Without Help." By the use of hives and implements adapted to his system, he is able to visit each yard every 4 days; the honey can be extracted or taken home to be extracted. He uses the Heddon hive; the colony is examined for queen-cells between the two sections of the hive, the top portion being raised or tipped back by an implement of his own design. If there are signs of swarming the colony is divided.

The subject of producing comb or extracted honey was taken by Mr. Anguish. What he thought to be of more importance was to have strong colonies, then you can produce either, but he did not like to put on sections towards the close of the honey-flow; he would put on an extracting super. Another important point brought out was, that strong colonies ripen their honey better than the weak ones.

An address on foul brood was given by Mr. Gemmill, Assistant Foul Brood Inspector of Ontario. He considered our foul-brood laws very good, as some of the States had copied from them. The disease is on the decrease. He considered it more dangerous with young bee-keepers, who were more likely to have robbing, and spread the disease. A suspected case should be destroyed, or treated in a careful manner by shaking on starters, then in 3 or 4 days shake again on full sheets of comb foundation. Caging the queen will prevent them from swarming out.

Reforesting was discussed, led by Mr. Robb, who

thought that bee keepers should plant basswoods and honey-locusts.

The sowing of buckwheat for honey alone was not thought advisable, as it requires a warm, light soil and a moist atmosphere, to secrete nectar.

The following are the officers for the ensuing year: President, Morley Pettit; Vice-President, F. J. Miller; and Secretary, E. L. Bainard, of Larnbeth.

E. L. BAINARD, Sec.



Contributed Special Articles

Some Mistakes of Bee-Keepers—Pests of the Apiary

BY C. W. DAYTON

I NOTICE the mention of "Prevention of Swarming by Inversion," on page 517. This was one of the operations performed with the "Queen-Restrictor," which I described in *Gleanings* in 1889 or 1890. When we first begin to experiment with a contrivance we watch it daily, or even hourly, sometimes. But when we get a large number of the new contrivances in use the colonies increase, and corresponding profits invested in more "irons in the fire," our experiments are liable to be conducted by the "lick and promise" fashion.

I believe the "Inversion" system failed because it was too much labor. During the several years since that time I have looked upon the "Queen-Restrictor" as a waste of thought. But last year when the colonies bred up so strong that they clustered all over the fronts of the hives when there was no prospect of there being a pound of honey for them to gather, I wished then that I had a "Restrictor" for every queen.

OUTDOOR FEEDING OF BEES.

On page 553, Mr. Hasty suggests in regard to my outdoor feeding, that I could have exchanged a few full combs from the strong colonies into the weak. So I could have done, but I was very busy at other kinds of work, and supposed if the feed was supplied all the time the strong would get stronger, and the weak would get enough to live and build up somewhat. It seemed that about 50 would not even carry it home. I thought that I could spare no time so much as to raise the covers, and did not go amongst the hives more than once in 10 days. I did not know there were more than a dozen dead until I needed the hives to put swarms in, and that was often not until the swarm was already on a bush. Though there was lack of attention there was no lack of feed put out, and I had 7 or 8 tons of honey to draw on, and it was not used grudgingly.

As it turned out, there were 30 to 40 swarms about two weeks earlier than in other apiaries, and kept nearly one extracting ahead of other apiaries.

Now, attention is usually the cheapest article in the whole apiary management. I have a very large stock of attention, but there was not enough of it where it ought to have been. I think Hasty, Doolittle or Miller ought to have warned me beforehand. As it is, I can not use their advice until it happens again.

We see bees so anxious to rob at sometimes of the year that we take it for granted that they will rob at all times. I had been reading of "short cuts." The "cut" I chose was very "short." One day last January, with the thermometer at 76 degrees in the shade, I went to one of my apiaries of between 60 and 70 colonies, and at about 7 o'clock in the morning put out several feeders of half honey and half water boiled together. I put this feed right in amongst the hives. Then I went into the shop to await developments. I expected to hear the sound of robbery in a few minutes.

Eight o'clock came, and 9, and at 10 o'clock I went to see what was doing. Only 5 or 6 bees around the feed! Said I to myself, "Is it possible that this whole apiary has 'gone up'?" I kicked a hive; a roar of bees came. I kicked another; a roar. Another; a roar. And so on along the line.

"Well," says I, "this shows that bees do not know things all of a sudden and without previous experience." It

took me 4 days to teach those bees to rob and take the amount of feed I expected to give them in 6 hours.

If I had put out feed in that manner in August or September, it would cause such a furor as to cover the hives black with mad bees, which would attack people in the streets and nearest houses within an hour. Since there were 160 colonies in good order when the present honey harvest began, we were somewhat satisfied, having set the mark several years ago not to keep above 120 colonies.

SKUNKS IN THE APIARY.

But there may be other mistakes made besides those along the line of feeding. In September, two years ago, it was found that skunks were working about some of the colonies. By the use of poison and traps there were 8 destroyed during the fall. This seemed to clear them out so that there were no more about our apiary during the next season also.

A near-by apiarist having 225 colonies, when I asked him if his bees were bothered by skunks, said he did not care if they were; it would clear out some of the bees and save feed. He lived about 50 miles away, and left the bees in charge of a neighbor, but with no instructions as to skunks. It could be readily seen that there were plenty of skunks about.

As nearly as I have been able to determine, a skunk will work at a colony for 2 or 3 weeks until the colony becomes weak, then go to another hive, and so on for some 6 months or more. In this way a skunk will depopulate 6 to 8 hives during one season. It leaves the colonies too poor in bees to last very long.

Eight skunks would get away with 64 colonies. If undisturbed they will breed the next spring, and in the following fall return with the increase. This was what this apiary went through, between the good season of 1903 and the spring of 1905, when there were 89 colonies left. When the owner was asked how he lost so many, he said by robbing. This bee-keeper fed sugar. I fed honey. He contracted the hive-entrances to $\frac{1}{2}$ inch. I contracted none at all, and saw no robbing. His loss, figured from our yield, would amount to 10 tons of honey; that is, 135 colonies at 150 pounds per colony. At 5 cents a pound it would amount to \$1000. Just what part is chargeable to skunks is a question. A half pound of beef and a little strychnine would have "settled their hash" in short order.

When skunks cost a bee-keeper \$100 a head, it ought to attract his attention a little. He might stoop to take a few, if for no more than the hide and tallow. It might add variety to life, and set his blood to circulating during an off year.

One day last June a bee-keeper came to my apiary about 7 o'clock in the morning to borrow a smoker. He had set his smoker on a bee-hive while he went into the house to extract. A spark fell out and set the hive on fire and then burned the smoker. He intended to start for the city the same evening, but had 500 pounds of honey to take off his hives to complete his load and give the bees storage-room during his absence. In some apiaries one can extract without smoke, but this apiary is the other kind.

At sunset the smoker I was using tipped over, setting itself on fire, burning the bellows all off. By dark I had a new bellows completed. The next morning I attached it to the barrel in 5 minutes.

Only for a few tanned skunk hides lying around I should have been obliged to make a trip of 30 miles, or wait for the mail to bring a smoker from the city. So I have come to regard the skunk not as a detestable animal, but simply a walking smoker-bellows!

After cutting out the two pieces to form the bellows, the odds and ends are used for hinges and latches to the baby-nucleus hives; a latch for the honey-house door; a strap for the hive-opener; a small part on the back of the neck is of the right thickness for the leather part of the screw-cap honey-gates. But the best of all is a patch of leather on each knee, padded underneath so as to drop upon the knees when examining colonies. This is about as good as a seat, and more handy. The blacksmith wears an apron. An apiarist might wear a part of one. It is very restful to change from the long-continued walking and stooping position. I have sometimes thought that I could do one-fourth more work by these change-about positions, especially in examining brood-chambers and in queen-rearing.

Then the oil of the skunk is useful. It will keep the hinge-end of a jack-knife blade from wearing off round so it will shut up in an unexpected moment and cut a gash in the apiarist's finger. It is good on the cogwheels of the

foundation mill. A clock may run too fast in summer and too slow in winter, and the bee-keeper is continually trying to regulate it. At last he becomes disgusted and throws a good clock away as worthless. Or he takes it to some tink-er, who, if he were a bee-keeper, would extract his honey before it is sealed. The clock runs about as long as unripe honey will keep, and then gets back at its same old tricks. Look at the clock, and then at the sun, to tell the time of day. Poor or adulterated oil will harden and retard the speed of a clock in cool weather, and do the opposite in warm weather.

The gun should be kept as bright as a new silver dollar throughout the inside of the barrel. It takes oil. We can not buy oil and be sure of what we are getting every time. While some oil will appear to be all right, it has often been mixed with an adulterant that spreads a tarnish in the gun that shot and powder can not remove. When we aim at a bee-bird that is perched above our hive of best drones, we want the bird to fall instead of flying away unharmed. Bee-birds (not king-birds) will lurk for hours around a baby nucleus in which we may have a dozen hand-picked drones.

OTHER PESTS OF THE APIARY.

There are pests as well as climate in Southern California, and rats and gophers are no trivial affairs. If we keep a tank of honey 3 feet from a tree, rats will climb the tree and make a flying jump into it. If we spread a cloth over a tank so that the corners hang down, rats are sure to climb up on the under side and get into the tank. I have known them to carry away a bushel of side-bars to make a nest, and cut large holes through the sides of hives. They delight in carrying away files, bits, nails, hinges, nail-sets, screw-drivers, etc.

When I bought an acre of land in southeast Los Angeles, I set a row of eucalyptus around the outside, then 12 feet inside another row of cypress, inside of which to place my 120 colonies of bees. There were about 300 trees in all. By fall they had all been destroyed by gophers except a dozen or so.

Before I purchased the land it was planted with pumpkins. A man came along one day and called out (I think he was lately from the East): "What will you take for that patch of pumpkins?" "How much will you give?" "Five dollars," he answered.

When he came to gather them he found them to be merely skins filled with dirt, the seeds and meat having been removed by gophers. I bought lumber and kept a tight fence around the bees until I could learn to protect trees from gophers. I have known a gopher to gnaw a hole through the bottom-board of a hive and completely fill the hive and super with earth.

The aspects of neighbors toward gophers is about the same as the above-described bee-keeper toward skunks. I might continue describing their peculiar antics until it would fill several bee-papers. The main thing to impress upon the reader is that when we see a pile of fresh earth and a gopher's head sticking up beside it, out in the middle of the neatly-dressed lawn or bee-yard, to make it the last time he ever pokes his head out anywhere.

Due respect for the business demands that we learn to steer clear of all difficulties, or, in fact, change many difficulties into advantages. Watch for my article on trap-setting.

Chatsworth, Calif.



Comb Foundation and Its Uses

BY ADRIAN GETAZ

AT this day the advantages of using foundation liberally are so well known that it is hardly necessary to mention them. In the brood-chamber the advantages of securing straight combs of all-worker. Furthermore, the increased rapidity of brood-rearing (that is, in case of a swarm hived without already built combs). If no foundation is given, or only small starters, the queen is obliged to wait until the combs are built before she can lay any eggs. When full sheets of foundation are given, a day or so is enough to draw out as much foundation as she can fill with eggs. So there is no delay.

In the sections it is still more important to give full sheets. Only a few bees can work at a time on a small starter, so the building up of full combs is delayed. On a full sheet a large number of bees can work at once, draw out the foundation and add to it enough to begin putting honey in it before hardly anything could be done on a small

starter. I want to call the attention of the reader to this point, because it has not been sufficiently emphasized yet.

WIRING FRAMES.

The frames should be wired. The two faces of a sheet of foundation are seldom worked equally on both sides. The side toward the center of the cluster is usually in advance of the other. The result is that the sheet curves outside because the weight of comb honey and brood on the inner side is greater. Nothing but complete wiring prevents this.

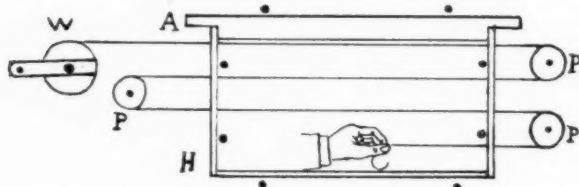
Wiring vertically would be a little the best, but it would require a larger number of holes, and therefore more time to make them and pass the wire through. Furthermore, boring holes through a thick top bar would be quite a job. A shoemaker's awl is sufficient to make the necessary holes in a thin end-bar.

It is not necessary to fasten the foundation to the top-bar—it is sufficient to have the top-wire near to it, not more than a quarter of an inch from it.

The wiring is done with thin tinned wire—I think No. 30 is the one advised and sold for the purpose by the supply dealers. In the factories the wire is wrapped around a board of sufficient length (the wrapping being done lengthwise); then the whole is tied at two or three places to keep the wire in place. All the turns of wire are cut in two at one end of the board, and the separate pieces pulled out from the other end and threaded through the holes of the frames. That process does very well when the wire used is in very large coils, because then it does not kink, or not enough to cause trouble. But it is impracticable with wire wound on small spools. No sooner would the piece of wire be drawn that it would assume a shape something like this:

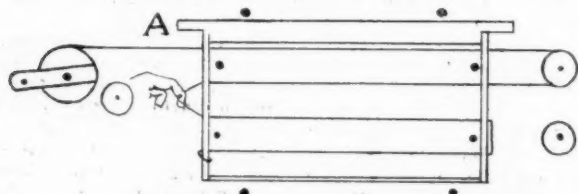


The ordinary apiarist will never need a large coil of wire. A half-pound spool has enough wire to fill several hundred frames. I use something like the figure shown



herewith. On a table, bench, or even a board, I drive a number of nails, as shown. Some are placed so as to hold the frame in place. Three of the others hold the pulleys (P) around which the wire passes. They must be small enough to permit the pulleys to revolve freely. It is better to put a washer under each pulley. I use sash pulleys from which the stems have been taken out. I just happened to have them. Some other apiarists who use a similar apparatus use, instead, empty thread-spools, probably also because they happened to have them.

Another nail holds the spool of wire (W). This spool has a crank which permits revolving it with the hand. The crank is made by nailing a small piece of wood to the pulley; and a nail at the other end of the piece completes the crank. The end of the wire is pulled through the successive holes and around the pulleys, as shown in the foregoing figure, and finally fastened at the last hole (H). The opera-



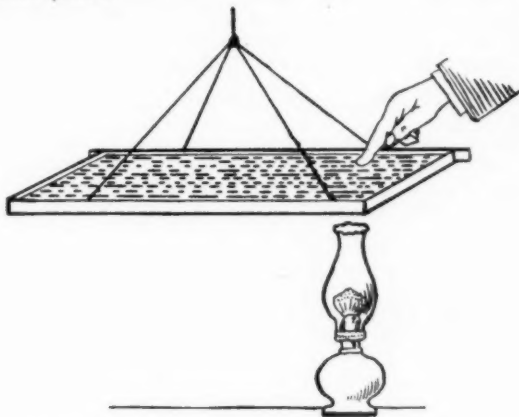
tor then holds the crank (W) with one hand, and with the other he releases the wire from the different pulleys in succession, as shown in the above figure, turning the crank

(W) so as to take up the surplus wire as fast as released. The wire is finally cut and fastened at A.

Looking at the figures and reading the above description impresses the mind as if the process were rather cumbersome. Practically it is not so. A frame is wired in less than a minute.

FASTENING THE COMB FOUNDATION.

Now comes the fastening of the wax to the wire. The Spur imbedder and Easterday fastener will do in a measure, provided the wax is rather soft. I prefer using a lamp, as per Dr. C. C. Miller's method. At least I think the process is his invention.



A string with four hooks is hung to the ceiling. A lamp is placed so that its glass chimney comes within about 2 inches of the foundation. A frame is hung to the hooks, and a piece of foundation placed in on the wires. The frame is then moved slowly over the lamp so as to follow the wire. The heat softens the wax and causes it to stick to the wire. A finger is held on the foundation so as to press it on the wire as it passes over the lamp. The light and wire can easily be seen through the sheet of wax.

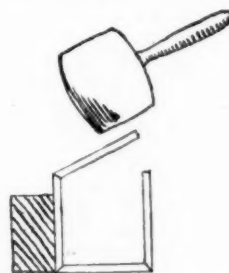
FOLDING SECTIONS.

Don't try to fold the sections dry. Too many would break in spite of all the care one might take. The joints must be wet so as to be damp when folded. If the work is done at home, the method of wetting given by Dr. C. C. Miller is the best. Take out of the crate the few side-pieces that hide the joints of the sections—that is, the edges of the sections—and pour hot water in the joints. As the



joints of every row of sections correspond, the water will go clear through and wet all of the sections properly.

I sometimes do the work in the apiary because I can easily take the crate of sections and the box of foundation on my wheel and do the work there under the shade of a



tree. As I have not the facilities necessary for hot-water proceedings, I follow another process. Three small sponges are fastened to a small, flat piece of wood. This constitutes the instrument to wet the three grooves at a time. The wetting must be done on the back of the sections, as shown in the figure. Forty or 50 sections are wet and then folded before they get dry. The process is quicker than one would think when reading the above.

The folding is best done with a Hubbard machine. The next best is a mallet or a hammer with a wide, flat head. The operation is done on a bench or table, the section being folded against a block of wood nailed to the bench, so as to secure a square joint.

FASTENING COMB FOUNDATION IN SECTIONS.

In wetting the sections for folding, it is impossible to prevent the water from spreading more or less through the wood and thus dampen more or less the surfaces to which the wax must adhere. Now the wax will not "stick" well to a damp surface, and the foundation should not be put in the sections until they are perfectly dry.

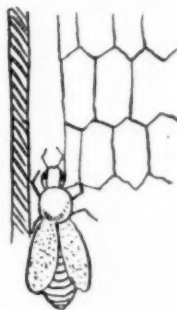
The Parker foundation fastener, and others acting by mere pressure, are not very satisfactory. They will work only when the wax is quite soft. When I need only a few sections I sometimes use the point of a knife or of a screw-driver instead of a Parker fastener, but it is only a makeshift at the best.

The Daisy fastener is all right—it is a daisy, sure enough, except, perhaps, that the plate should be arranged so that the dripping wax should come to the front and help fasten the next piece instead of running off. For small starters, say half sheets at most, there is a still better way. Just put a small tin dish, that you can make yourself, over a lamp or oil-stove. Taking the starter in the hand apply the bottom of it against the dish so as slightly to melt it, then apply it promptly to the section at the right place. The process is even quicker than the Daisy method, but is not practicable with full sheets.

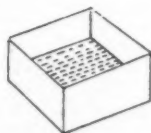
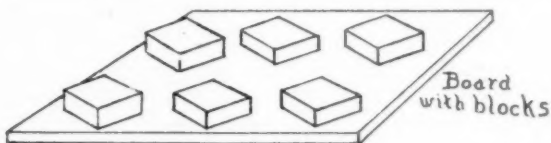
FULL SHEETS VS. STARTERS IN SECTIONS.

If only starters are used, I prefer to have them of a triangular form rather than a straight, narrow strip. Exactly how it works I can not tell, but the sections are better filled. At least it seems so to me. But I would advise using full sheets whenever possible. They will be built into combs much faster, and that means more surplus, and, to some extent, less clogging of the brood-nest, and therefore less tendency to swarm.

The next question is, How full—that is, how near the wood along the sides and bottom must the sheet come? Of all the distances about $\frac{1}{4}$ of an inch seems the worst of all, as far as my experience goes. The bees draw the foundation, and then seem unable to reach properly the middle of the comb and extend it to the wood, something like this:



The best results are obtained by having the foundation reach *within one-eighth of an inch* of the wood. The bees will usually fasten it at once to the wood all around, and then but little bulging will take place—not enough to injure the sections, since the outer surfaces follow the separators.



Section over block and foundation

If a dearth of honey follows putting on the sections, the bees sometimes gnaw out the edges of the sheets instead of fastening them. Fastening all around will avoid that. Furthermore, it is claimed that when the foundation is

fastened all around with melted wax, the comb will never break off from the wood, no matter how far they are shipped. I fasten only at the top.

I have not been able to put in foundation with the Daisy fastener so that it would come within one-eighth or less of the bottom. The hot plate melts sometimes more, sometimes less of the sheet, usually entirely too much. I prefer to use the melted-wax plan. A dozen square blocks just the size of the inside of a section, and half the thickness, are nailed to a board. Pieces of foundation are placed on the blocks, and the sections slipped over. The melted wax (just enough, and no more) is poured then, say at the left-hand corner, and let it run to the bottom corner of each block. To pour the wax, I use a spoon made of tin which has a kind of spout shape with a very small hole (H), permitting the use only of the quantity of wax needed, and yet operate rapidly. If it is desired to fasten all around, the

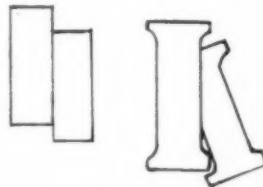


other corner is treated the same, and then the board turned upside down, and the other two sides fastened in the same way.

SECTIONS AND SEPARATORS.

The first 2 or 3 years of my bee-keeping I used bee-way sections with plain separators. Then Oliver Foster began advocating 4-bee-way sections without separators, chiefly on the ground that the bees could cluster better, and therefore secrete wax and build comb better. That is true to a large extent, but it depends upon the circumstances. With strong colonies and quite warm weather the difference does not amount to anything. Under the opposite circumstances it might make all the difference between a crop and nothing. If separators are omitted, use the 4-bee-way sections, by all means. The sections will be built far more evenly and regularly than with the 2-bee-way sections.

I have used the 4-bee-way sections without separators since then until now. I am now replacing them with the feuces and plain sections. One reason is that even with the 4-bee-ways the sections of honey are not quite as regular as desirable for the best results. The other is that the plain sections are easier to handle. I don't know whether I can make this point understood or not. In handling sections it is not always possible to keep them perfectly even, sometimes they are little out of line with one another. In such cases a plain section is not liable to damage the next, while the corner of a 4-bee-way section will almost inva-



riably gouge into the next one. Perhaps this figure may help the reader to understand what I mean.

SOFT AND HARD COMB FOUNDATION.

The European writers tell us that the soft comb foundation made by the Rietsche press, plaster molds, etc., does not stretch and bulge like the hard ones—that is, the Weed and other hard-rolled ones. The explanation given is that in the hard-rolled, compact foundation the wax is in an abnormal condition, and that the heat of the hive causes the wax to expand back to its normal condition, and thus cause the bulging and stretching.

Recently it has been asserted that by heating the hard foundation as much as possible, and keeping it at that point a few moments (I suppose 10 or 15 minutes) it becomes as soft as the molded foundation, and stretches or bulges but

very little when put in the hives. This kink is certainly worth a trial, anyway.

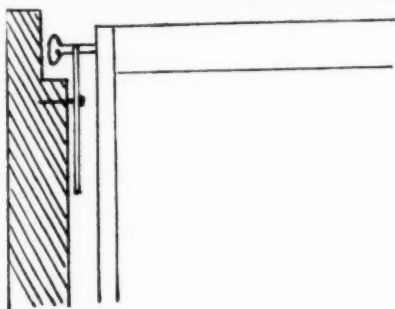
PRICES OF BEE-SUPPLIES.

□ Much has been said lately about the prices of supplies being too high. That may be. But as long as the demand practically exceeds the supply, the prices will be stiff. If the honey-dealers were short, and running after us to get honey—my, my, how the prices would go up!

Well, if the price of hives is too high, make them yourselves—that is all there is to it.

Right here we need some clarifying, as Hasty would put it. As a matter of fact we are making them already, the dealers furnishing us only the lumber dressed and cut. So, after all, the question is whether we shall buy from them or order our stuff at the nearest wood-working establishment. The box-making concerns are likely to give the best satisfaction. To say that nobody but the bee-supply men can cut the lumber just right for hive-making is mere bosh. The assertion that a precision like clock or gun work is required constitutes also a considerable stretching. The chief points are the length of the frames. These must fit each other, and be the same for all the hives. If necessary the end-pieces must be nailed a little in or out, so as to preserve the exact inside length.

Of course, the so-called dovetail corners should be abandoned, and plain corners substituted. The frames should be plain, wood frames. The best, easiest made, and



cheapest, are those hanging with nails on a tin strip. Small notches on the tin will hold the frames at the right spacing, and at the same time permit the apiarist to push them aside

to take them out, or hold a queen-cage or queen-cell between them.

The stuff for frames should be ordered in long strips. For reasons too long to explain here, a short stick cut to length costs nearly as much as a strip 8 or 10 feet long. With a miter-box the apiarist can, in a short time, cut enough pieces to make all the frames he needs. To avoid danger of splitting the wood when nailing, the pieces can be clamped in a small hand-vise while driving in the nails.

Knoxville, Tenn.

Honey as a Health-Food.—This is a 16-page honey-pamphlet intended to help increase the demand for honey. The first part of it contains a short article on "Honey as Food", written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last part is devoted to "Honey-Cooking Recipes" and "Remedies Using Honey". It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey the more money they will buy.

PRICES, prepaid—Sample copy for a two-cent stamp; 50 copies for 70 cts.; 100 for \$1.25; 250 for \$2.25; 500 for \$4.00; or 1000 for \$7.50. Your business card printed *free* at the bottom of the front page on all orders for 100 or more copies. Send all orders to the office of the American Bee Journal.

Please send us Names of Bee-Keepers who do not now get the American Bee Journal, and we will send them sample copies. Then you can very likely afterward get them subscriptions, for which work we offer valuable premiums in nearly every number of this Journal. You can aid much by sending in the names and addresses when writing us on other matters.



Our Sister Bee-Keepers

Conducted by EMMA M. WILSON, Marengo, Ill.

Bees Flying at Low Temperatures

Bees seem to chill quite easily when separated from the cluster, and yet they sometimes fly at quite a low temperature. On the morning of Nov. 14 the thermometer stood at 14 degrees in the shade. When it got up to 26 a very few bees could be seen flying. Evidently that was warm enough for them. Bees will be seen flying out in small numbers at a much lower temperature when they have been long confined; and many such bees come out only to meet their death. But Nov. 14 there was no pressing need of their coming out; there had been no long confinement. Indeed, they had flown the day before, and not only the day before but for 4 consecutive days immediately preceding. But there were two things that specially favored their flying—the sun was at its brightest, and the air its stillest. A day or two later not a bee was stirring when the thermometer was considerably higher; probably because there was something of a breeze from the northwest.

The Sisters and the National Convention

In putting the date of the National convention Dec. 19, 20, 21, if that is to be its date, the sisters do not seem to be taken into account. Christmas comes on the Monday following, and what chance will there be to prepare for it if those who are to make the preparation are expected to be at the convention? Very likely some of the brothers will say that from the 21st to the 25th there are 4 days, and ask how much more than 4 days are needed to prepare for Christmas. Little they know about it. They are accustomed year after year to sit down to the Christmas table groaning under its load of good things—I confess I never heard a table groan, but it sounds well to say it that way; the groaning is generally done afterwards by those who have stuffed themselves with the good things—they sit down and enjoy it all, with little thought as to how much time, thought, and labor it has all cost.

But there are no 4 days about it. If the convention closes Thursday night, the return home will be Friday—maybe Friday afternoon, maybe Friday evening—depends on the distance. At any rate, no sister will be in best shape to pitch right in the minute she takes off her Sunday clothes, so little or nothing will be done Friday; Sunday doesn't count, and there you are with Saturday the only day for making any previous preparation for Monday's gorge.

No, my good brother, it isn't all cooking, either. There are to be family gatherings—aunts, uncles, cousins, and all; and everything about the house is to be made spick and span. "No need of that if the house is already in decent order?" Now see here, who wants to be thought any poorer housekeeper than any other of the relatives? So the house must be overhauled from top to bottom, no matter how lately it has been done. At any rate, they all do it, and that's all there is of it.

"Not very much about bees in all this?" To be sure there isn't; but some of the sisters will feel better to have their minds spoken for them.

SISTER BERTHA.

Sister Bertha, there's much truth in what you say; but there are two sides. The great matter that overrules all other items in getting together a large number at a National convention is the matter of railroad fares. A chief consideration in having the convention held at the given time and place was that at that time and place very low fares could be had. The Fat Stock Show—the biggest thing of the kind on earth, we are told—gave the low rates. Then a large number of bee-keepers would want to attend the Fat Stock Show anyhow, even if no sisters should be of that number.

When the date was first set, it was 2 weeks earlier; no

trouble about Christmas then. But the building for the big show could not be completed in time, hence the postponement of a week. What else could be done but to postpone the bee-keepers' convention for the same length of time?

So we mustn't be too hard on the brothers.

There is, too, another item that counts for something, and for which the sisters are alone to blame. The proportion of them in attendance at conventions is so small that it ill becomes us to make much clamor about preparations being made just to suit our convenience. Let the sisters attend in large numbers, and no doubt their needs will have full consideration. At any rate, the particular chain of circumstances that made the trouble this time is not likely to occur again in many a long year.



Mr. Hasty's Afterthoughts

The "Old Reliable" as seen through New and Unreliable Glasses.
By E. E. Hasty, Sta. B. Rural, Toledo, Ohio.

ADVERTISING ADULTERATED HONEY.

No, we haven't got so far yet in the bad path of adulteration as publicly to advertise alleged candied honey at 3½ cents. Yet we have more call to improve than to brag. And when we get our door-yard a good deal cleaner than it is now, perhaps our shining example will move the Germans to clean up their door-yard, too. Page 758.

WELL-RIPENED COMB HONEY.

A month in a hot room, *a la* Doolittle, is excellent for the honey before sending it to market. But the same time on the hive is still better; and at some few apiaries the conditions are such that the honey can well enough be left on the hive as long as you choose. That is, there are lots of bees and hives, but yield per hive always small. A suggestion of this kind is likely to raise something akin to a riot among many of our brethren. So wedded to the orthodox teaching that sections must be taken off the minute they are sealed—else the immaculate whiteness so much admired will be sullied. Truth. Not the only truth. And I think it is not by any means a hopeless task to get customers intelligently to prefer quality to looks. My experience with customers indicates this. And the experience of many grocers with the snow-white article is such that they get disgusted with selling honey, and quit keeping it. Small grocers, whose trade takes quite a while to carry off even one case, are especially liable to drop off this way. Here's a way of killing off the honey market that is not often talked about. I have had the pleasure of having a city grocer ask me what was the reason my honey kept in so much better order than the immaculate sections we have been talking about. Page 759.

LEAVES FOR WINTER PACKING.

I see C. P. Dadant speaks favorably of leaves for winter protection. I am getting weak on them. Haven't kept the mathematics of the thing, but it seems to me that in an extra-severe winter a larger percentage of the colonies under leaves die, as compared with the colonies under chaff. Page 759.

UNLUCKY 14—NUCLEI SWARMING.

So 14 is an unlucky number now, 'cause Mr. Day had 14 colonies and somebody stole 1 and left him with 13. Mr. D.'s experience that 2-frame nuclei swarm after awhile, when swarming gets to be the rage, is not a thing to be surprised at. Page 763.

NOMINATIONS FOR THE NATIONAL.

I was interested in the discussion about nominations on pages 773 and 774. Logically, our Boss holds his own pretty well; but practically, the Review's main point impressed me the most. The object desired is to avoid re-electing the old incumbent *except when a majority really and earnestly desire a re-election*. If they do, the Review's plan will not do him any serious injustice. As it is, he is as sure to get the largest number as he was under the old

plan to get the election. Then on the formal ballot the floating vote goes to him and elects him. Name one other name beside his, and hide the fact which has the most supporters, and we have done the most which can in fairness be done (it seems to me) to secure rotation—if that is what is wanted. If not, whence all these tears?

AN AMERICAN IN GERMANY.

Glad Prof. Cook can reside in Berlin and yet prefer America, and think lovingly of it every day of his life. Page 774.

THE "OUTS" AND THE "INS."

So the heavy fellows of New York were shy of a Honey-Producers' League with the honey-producers left out! What new thing is this in the world, that the outs should be suspicious of the ins? Page 775.

BLACK BEES VS. ITALIANS.

And so able a brother as Allen Latham "doubts greatly whether any one can demonstrate that the black bee is inferior to the Italian in keeping out the "moth." There you have it, good and hot. Sam's daughter just as strong as Sam's son. 'Spects it's good for the worshipers of the 3-banders to see how much depends on the color of the glasses with which one looks at a thing. As for me, I'll be propitious and chime in with Mr. L. Blacks get a worse reputation than they deserve for worm-hunting on account of their greater disposition to *quiescence* or summer hibernation. During such a period moth-larvæ may get more or less start in out-of-the-way crannies; but, pshaw! there's no danger of their triumphing over the colony. The sleepy disposition will be thrown off, and the fighting clothes pulled on, long before that happens. Italians incline to keep up extreme activity whether they are making anything at it or not. It's at least a legitimate subject of inquiry whether they really gain or lose by this, as compared with the quiescent tactics in lengthy times of dearth.

Interesting to see that Mr. Latham has been trying to rear choice black queens. He finds them hard to get mated, when Italians mate all right. His solution—that Italian virgins fly slowly, while black virgins fly too swiftly to be overtaken—I doubt some whether that solution is the right one. Still, perhaps it may be. Page 775.



Doctor Miller's Question Box

Send questions either to the office of the American Bee Journal,
or to DR. C. C. MILLER, Marengo, Ill.
Dr. Miller does not answer Questions by mail.

Requeening—Fertilized Queens—Wintering Bees

1. When is the best time to requeen?
2. If I buy a queen of a responsible breeder, will she be already fertilized?
3. What is the best way to winter bees here—the coldest weather is about zero—to put straw around the hives, or put them in a dark cellar with no ventilation but a door?

KANSAS.

ANSWERS.—1. A good many think it is as well to leave the matter of renewing queens entirely to the bees. Others prefer to take the matter into their own hands and replace each queen when she has done two seasons' work. Possibly, however, you mean the best time in the year to introduce a queen. Not till the season is well under way; and special circumstances must decide whether it is better to operate in the harvest or near its close.

2. Yes.

3. As far south as 39 degrees in Kansas bees will likely do better out-doors.

Managing Swarms—Feeding in Winter

1. I have read in the bee-books that when the first swarm issues to hive it and set the hive on the old stand, putting the old hive as close as you can beside it, then a week later move the old hive some distance away. Now,

when I hive the first swarm, should I set the hive of the parent colony beside the swarm as soon as the swarm is in the hive, or should I wait until dark? And when I move the parent colony away, should I do it when bees from both hives are in the field at work, or should I wait until night when all are in their hives?

2. Is there an insect that works on honey when taken off? If so, how can it be prevented?

3. My neighbor gave me some colonies of bees that are very light, and have not enough honey to last them the first part of the winter. I know they should have been fed early, but what is the best way now to feed them through the winter, and what? or must I lose them? They have plenty of bees.

IOWA.

ANSWERS.—1. If, when you set the swarm on the old stand, you leave the mother colony at some distance until night, you will be likely to get more of the bees with the swarm than if you at once set the old hive beside the swarm; but the thing will be evened up a week later. It will make more difference which way you do when you make the shift a week later. If you make the change after dark, there will be no change felt till the next day, and then the feeling will come gradually as each fielder leaves the hive and fails to return. If you move away the old hive at a time of day when bees are afield, and especially at a time when the young bees are at play, not only will you get the fielders to leave the old hive and join the swarm, but all the young bees at play as well, making the depletion greater than if you made the change after dark. So it will be a little better to make the shift when the bees are out at play.

2. I don't think of anything but ants likely to get the honey in this country, and you can shut out the ants or destroy them in their nests.

3. Don't think for a minute of losing those bees for want of food. If you have no combs of sealed honey, make cakes of candy as directed in your bee-book; or even feeding thick sugar syrup in a Doolittle frame-feeder or in a pepper-box feeder would be better than to let them starve.

Bees and Tobacco Odor

As I keep about 15 colonies of bees I would like to have your advice. I have built a basement cellar this fall, in which I intend to keep my bees through the winter, and I am also raising tobacco. I would also like to use the same basement in which is the tobacco crop. Do you think that it would hurt the bees any to have the tobacco in the same room through the stripping—about a week's time. There might be some dampness and strong smell from the tobacco.

WISCONSIN.

ANSWER.—It isn't a good thing for people to live in the smell of tobacco, but I think the bees would stand it for a week. But there must be some arrangement to keep the bees darkened during that week.



Convention Proceedings

Report of the Texas Convention

BY LOUIS H. SCHOLL, SEC.

(Continued from page 825)

HOW TO PRODUCE EXTRACTED HONEY.

A. H. Knolle says there is good sale for extracted honey. Last year the demand was greater than for comb honey. If more was produced more of it would be sold, and it would cut out the cheap-syrup trade more than if comb honey was produced.

Mr. Robinson is an extracted-honey man. He builds the colonies up in two hive-bodies. He claims that old combs are detrimental to the production of first-class extracted honey, therefore he continually replaces them, working the old combs into the brood-chambers. He runs colonies three stories high during the honey-flow. During the winter he leaves an extra extracting super on the hive.

Mr. Butts uses full-depth supers for extracting.

Mr. Bell favors the full-depth over the shallow supers, as he has used both.

THE PRODUCTION OF SECTION HONEY.

H. A. Mitchell, who was on the program for this subject, was not present. He is the only extensive section-honey producer in Texas at present, and he produces annually much of this kind of honey. It is of the very best quality, and mainly from basswood. The honey is produced in $4\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{3}{4}$, narrow, 4 bee-way sections. This gives a thin comb with a large surface. He has won several premiums and a gold medal on his honey.

BEST AND SAFEST WAY OF INCREASE.

Mr. Laws said the best time with him to make increase is right after the honey-flow. He manages all his colonies for the honey-flow, and at the time of its close he makes the increase, either right after or while he is making his last extracting. He sees after taking off the combs of honey from the hives himself, while the boys take it to the extracting house. If he wishes to increase about 25 colonies in an apiary of 100, he has that many hives ready on new stands. As he comes to combs in the extracting supers which contain brood, he places them with the adhering bees into these prepared hives. Several combs of brood and honey are thus given to each, no attention being paid as to which hive the bees are from. A ripe queen-cell is then given and the nuclei are built up. Nearly every bee-keeper can have an abundance of cells at that time.

Mr. Atchley stated that it is easy to make increase in his locality, as there are fully 9 months in the year in which the bees are breeding heavily. The question with him has been, which is the *safest and cheapest* way of increase, as he sells many bees. He drives up to an apiary where he has his colonies in 2-story hives, taking with him 100 empty single-story hives with covers and bottom-boards. Then he draws one comb of brood and one of honey from each strong colony to make one nucleus. These he places in a hive until he has a load, when they are hauled off to a new location, so that the bees do not return to the old stands and so the bees from the old apiary do not molest them. Here each is given a virgin queen and they are built up with foundation. If there is no honey-flow it is easy to feed them, as there are no other bees to bother these small colonies off by themselves. They are not near to the apiary to be tantalized by the bees from it.

Mr. Milam said, as he stated before, that there are no two seasons alike. In an average year in his locality, April 1 is the best time for increase. The best flow comes April 15. He takes the old queen and all the bees on the same comb, gets two other combs of brood and bees, placing them in a hive on a new location. The old hive is given a queen-cell. He has about 15 to 18 combs of brood to a hive. The bees swarmed very much this year at the 1st of April, which made it a good season for increase. By removing the old queen, March 15, and dividing the colony into 1-frame nuclei, adding full combs of brood from time to time to build them up, he is enabled to increase 1,000 per cent in 2 years.

Mr. Atchley said that Mr. Milam's way of making nuclei is a good one, but a novice may lose from one-third to one-half of them if practised in the old yard.

Mr. Bell has studied the subject of increase thoroughly. While Mr. Atchley's way is a good one, it is not the safest. He bursts a strong colony half in two, simply dividing it. He dwelt for some length upon the Alexander method of increase, given in the bee-papers some time ago. All the brood is placed in an upper story above an excluder. The queen is put below on empty combs. In 10 to 11 days there are plenty of cells above, and the brood is in such condition that there is no danger of any loss. The upper story is set on a new stand, and in 2 weeks 2 colonies with a good queen in each is the result. The old queen is thus given a chance to do good work.

Mr. Atchley thought that his own plan was the best and safest for the novice, as the bees were taken away to themselves, where they could be properly taken care of. Besides, his method does not interfere with the colonies run for honey. He always increases from the strongest colonies with young queens, and never from colonies with old queens.

Mr. Victor keeps a colony from swarming after the bees have the "fever" by spreading the brood and placing between each comb a frame with foundation. The other brood-combs are placed in another body, arranged in the

same way and set above the first, or the extra brood is used for increase.

Mr. Laws practices the "shook swarming" plan on such colonies. The colony is shaken into a new hive with only starters in the frames. The brood and some of the bees are set on a new stand for increase. He has had trouble about getting the bees to remain after shaking. If a comb of unsealed brood is given, queen-cells are started on it and the bees abscond to the woods. This they also do if sealed brood is given. A frame of honey keeps them. He favors the "shook swarming," both for honey and increase.

Mr. Aten advises that not more than 2 colonies be made from 1. He does not like the idea of dividing it into 10. It is so easy for a beginner to figure these things out on paper. For instance, a start is made with one 10-frame colony. This is divided into 10. Each one of these produces 100 pounds of honey—and failure is almost certain.

From the audience: "It would teach them a good lesson." (Laughter.)

Mr. White, in referring to the Alexander method, cautioned bee-keepers against placing the queen below the excluder on empty combs during cool or wet weather. There is danger of the bees clustering around the brood above, and leaving the queen below unprotected, where she may be chilled and succumb, or be injured so that she may become worthless.

If Mr. Victor wants increase for the same season's use, he makes it by removing the unsealed brood and the old queen to a new stand. This leaves the sealed brood and the old bees on the old stand, leaving it in an ideal condition for the honey-flow. For increase for future use he practises the method as outlined by Mr. Atchley, except that he gives more combs of brood and honey, 2 of each to a new hive. In 15 days he examines them to see that all have laying queens. Dividing a colony into 10 or so is too risky, as the danger of bees deserting the new hives is too great.

(Continued next week.)



Report of the Chicago-Northwestern Bee-Keepers' Convention, held at Chicago, Ill., Nov. 30 and Dec. 1, 1904

(Continued from page 826.)

THANKS TO MR. ROOT.

Mr. Moore—I move that we present to Mr. E. R. Root, towards his expenses, the sum of \$5. Now, inasmuch as he has absolutely refused to accept anything, and says he will donate this sum to our foul brood fund; and inasmuch as our whole assembly was greatly entertained and interested by his exhibition of last night, I move you a vote of thanks be given to Mr. Root for his very fine exhibition of last evening.

Mr. Kannenburg—I second that motion.

The President put the motion, which was carried unanimously.

EXPERIENCE WITH ALFALFA HONEY.

"Has any one had any experience with alfalfa honey, and with what success?"

Pres. York—I don't know whether it means producing alfalfa honey, or handling it, or eating it, or what. I would say it is very good to eat.

Mr. Becker—I want to say I don't know anything about its production. I know that alfalfa won't produce honey in our locality. But alfalfa honey as a honey I have sold on the market, and I think it is equal to white clover, or next to it, none excepted. It sells readily; everybody likes it. And there is another thing about it, there are a great many persons that cannot eat honey, but alfalfa they can eat in great quantities. I would advise those that handle alfalfa honey, or sweet clover honey, if the store-keepers will not sell it, to mix it with some darker honey, for instance with heartsease or even buckwheat. Buckwheat I have not had for a good many years, but I use heartsease and Spanish-needle. Invariably in my locality they say this alfalfa honey looks too much like sugar; it hasn't the color of honey. I sell a great deal of it every winter. When I get this honey at this time, and I am out of other honey, I go around and get some Spanish-needle and heartsease honey, and heat it all and melt it in order to produce a different color of honey. Alfalfa is too light a color to sell in the stores. But as to alfalfa, it outsells almost any other kind of honey.

The regular stenographer, Mr. Angus, having to leave for his train at this time, Mr. Hutchins kindly reported the balance of the session as follows:

PAPER PAILS AS RETAIL PACKAGES FOR HONEY.

Mr. Abbott—A man in Colorado expressed to me a paper pail full of alfalfa honey. It reached me in good condition, and was of fine quality. It stood around in the office two days, when, by that time, it had all been eaten. If we could get hold of something like this to put up honey in for retail, it would be a fine thing.

ALFALFA HONEY CANDIES READILY.

Mr. Wheeler—When we mention alfalfa honey we are advertising a Colorado product; we ought to advertise our own honey. I have found that alfalfa honey candies very readily.

Pres. York—I have found that alfalfa candies very readily, and comb honey of this variety ought to be sold before cold weather comes on.

IS PURE ALFALFA HONEY HARD TO GET?

Some members expressed their doubts of the possibility of getting pure alfalfa honey. They thought it was largely mixed with sweet clover.

Mr. Abbott—I have been eating sweet clover honey for 20 years, and I don't think you can fool me with it. We get some honey from the West that is not all alfalfa, but I have no trouble in getting water-white alfalfa honey.

A bottle of honey, supposed to be sweet clover, was then passed around.

Pres. York—I have handled tons of sweet clover honey, and I should say that this is a sample of pure, sweet clover honey.

Mr. Snell—I get no surplus from alfalfa, but we have sent for some of the bacteria with which to inoculate the soil, and are hopeful of better results.

HAS ALFALFA HONEY SPECIAL MEDICINAL QUALITIES?

Pres. York—I have never heard that alfalfa honey possessed any special medicinal properties. I believe that basswood has been given that distinction.

Mr. France—I have sold my dandelion honey at an advanced price because of its supposed medicinal qualities.

Mr. Abbott—I suppose that all honey has medicinal qualities if it is used rightly. It is peculiarly effective in bronchial diseases.

WHAT IS AN UP-TO-DATE APIARY?

Mr. Horstmann—Where all of the hives are of approved pattern, the weeds and grass kept mowed, where there is an extractor used, and everything kept neat and clean.

Mr. Wilcox—I suppose that no old straw hives are used, and everything is kept neat.

SHEEP FOR KEEPING DOWN GRASS IN THE APIARY.

Mr. Reynolds—Sheep sometimes knock over the hives.

Mr. Wilcox—I don't know as I would at all times turn in the sheep, but, in the honey season, it seems to me it would be all right.

Mr. France—In procuring a site for an out-apiary, I select a pasture. The stock soon learns to work in the apiary at night. If hogs go into the yard, I want the hogs to have rings in their noses.

CAN HONEY-VINEGAR BE MADE AT A PROFIT?

Mr. Meredith—Waste honey can be used profitably for that purpose.

Mr. France—We can get a good price for honey-vinegar in our home market where we and the vinegar are known. I would advise the use of waste honey from washing capings, the washing of dishes that have contained honey, etc.

Mr. Wilcox—If we have honey that will sell at 4 or 5 cents per pound, can it be made into vinegar with profit?

Mr. France—I think not.

Mr. Hoffman—Give the process for manufacturing vinegar.

Mr. France—Make a solution of honey and water that will float an egg, then let it stand until it has turned to vinegar. That is all there is to it. There are quicker processes than this—those that expose it to the air more thoroughly than this—but it will not pay the ordinary bee-keeper to bother with them.

(Continued next week.)

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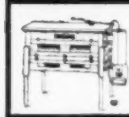
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CONVENTION NOTICES.

National Convention, Dec. 19, 20, 21.

The Fat Stock Show, upon which we have depended for reduced rates on the railroads, has been postponed two weeks, so the dates for the convention will now be Dec. 19, 20 and 21, 1905.

The place of meeting has also been changed to Brunt Hall, in the Bush Temple of Music, corner of North Clark Street and Chicago Avenue (entrance on Clark Street,) 5 minutes walk north from the Revere House, Southeast corner N. Clark and Michigan Sts., which will be headquarters for the members.
W. Z. HUTCHINSON, Sec.

The Chicago-Northwestern Bee-Keepers' Association will hold a social session at the Revere House, Dec. 19, 1905, at 10 a.m. At 2 p.m. the same day will be held the regular annual election of officers. Any other business coming before the meeting will be attended to.
HERMAN F. MOORE, Sec.

New York.—The annual convention of the St. Lawrence and Jefferson Counties Bee-Keepers' Association will be held at Watertown, N. Y., Dec. 13 and 14, 1905.

GEO. B. HOWE, Sec.,
Jefferson County Association.
Black River, N. Y.

New York.—The annual meeting of the Oswego County, N. Y., Bee-Keepers' Association will be held at Fulton, N. Y., Thursday, Dec. 14, 1905. Dr. E. F. Phillips, who is furnished by the Agricultural Department, is expected to be present and address the meeting.

MORTIMER STEVENS Pres.
CHAS. B. ALLEN, Sec.
Central Square, N. Y.

New York Bee-Keepers' Institutes.

A series have been arranged to be held in New York State as follows: Amsterdam, Dec. 11, 1905; Syracuse, Dec. 12; Watertown, Dec. 13; Fulton, Dec. 14; Auburn, Dec. 15; Romulus, Dec. 16; Geneva, Dec. 18 and 19. Dr. E. F. Phillips, Acting in Charge of Apiculture, United States Department of Agriculture, will attend and address these Institutes on subjects pertaining to bee-keeping.

Romulus, N. Y. C. B. HOWARD, Sec.

The New York State Association of Bee-Keepers' Societies will hold its annual meeting at Geneva, N. Y., at the Nester Hotel, Monday and Tuesday, Dec. 18 and 19, 1905. New and interesting subjects are to be introduced and discussed at this meeting, and all bee-keepers of New York State should make arrangements to be present. Good and reasonable accommodations have been secured. Headquarters will be at the Nester Hotel.

Romulus, N. Y. C. B. HOWARD, Sec.

New York.—A Bee-Keepers' Institute will be held in the parlor of the Central Hotel, Market Street, Amsterdam, N. Y., on Monday, Dec. 11, 1905. This meeting will be held under the direction of the Bureau of Farmers' Institutes of New York State Department of Agriculture, by the Fulton and Montgomery Counties Bee-Keepers' Society, assisted by the United States Department of Agriculture. Dr. E. F. Phillips, Acting in Charge of Apiculture United States Department of Agriculture, is expected to be present and address this meeting, and a good attendance is much desired. T. I. DUGDALE, Sec.
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Honey and Beeswax

CHICAGO, Nov. 17.—There has been a steady trade in honey to the small dealers who usually lay in a little stock at this time of the year. Prices are practically unchanged. The fancy grades of white comb bring 14@15c; that which is a little off 1@2c less; amber grades, 10@12c; dark and damaged lots, 7@10 cents. Extracted, white, 6@7½c; amber, 6@7c. Beeswax steady at 30c.

R. A. BURNETT & Co.

KANSAS CITY, Oct. 9.—The honey market here at present is very strong at \$3.25 per case for No. 1 and fancy white comb in 24-section cases; amber and other grades selling for less according to quality. Extracted in good demand at 6½c. Beeswax, 28c.

C. C. CLEMONS & Co.

CINCINNATI, Nov. 24.—The demand for comb honey is relaxing to some extent, owing to the majority of the trade being well supplied. All fears of a comb honey famine have been allayed. We quote fancy white comb honey at 14@16c. Extracted honey is in fair demand. Quote amber at 5½@6½c, according to the package and quality. Fancy white and white clover extracted at 6½@8½c. We are paying 28½c per pound delivered here for choice yellow beeswax. (We wish to call the attention of the producer to the above honey quotations, who mistakably expects to receive these prices for his product. The above are our selling prices.)

THE FRED W. MUTH CO.

TOLEDO, Oct. 17.—The honey market remains firm, with good demand, and prices the same as last quotations. Fancy white comb brings 15c; No. 1, 14c; fancy amber, 13c; buckwheat, 13c. Extracted, white clover, in barrels, 6½@6¾c; amber, in barrels, 5@5½c; in cans, 1c to 1½c higher. Beeswax in good demand, 26c cash, 28c trade.

GRIGGS BROS.

NEW YORK, Nov. 17.—There is a fair demand for all grades of white as well as buckwheat, and receipts are about sufficient to meet the demand. Prices are unchanged. We quote: Fancy white, at 14@15c; No. 1, at 12@13c; amber, at 11@12c; buckwheat, at 10@11 cents. Extracted honey: Market is well stocked with California, which is coming along in large quantities. The demand is fair mostly in

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small-sized lots. Prices remain about the same, 5½@6½c per pound, according to quality and quantity. Southern in barrels at 52@57c per gallon. New crop West Indian is now beginning to arrive and is selling at from 60@63c per gallon. Beeswax firm at 28@30c per gallon.

HILDRETH & SEGELKEN

PHILADELPHIA, Nov. 20.—The demand has been very good for honey in the past 10 days. In fact, it takes a little sharp, cool weather to get people started, and when they do start, the demand continues for some months. We would say, now is the height of the honey season. We quote, in a jobbing way: Fancy comb, 15@17c; No. 1, 13@15c; amber, 12@13c. Extracted, fancy white, 7@8c; amber, 6½c. Beeswax firm at 28c. We are producers of honey and do not handle on commission.

WM. A. SELSER.

ALBANY, N. Y., Nov. 8.—Our honey market is in healthy condition; demand good; receipts about equal to demand. Prices are not quite as high as last year, but the tendency has been to work off the honey before cold weather, and we think the crop has come forward more than usual this season, which is a good sign. We quote: Fancy white clover, 15c; A No. 1, 14c; No. 1, 13c; buckwheat, fancy, 13c; A No. 1, 12c; No. 1, 11@12c; straight buckwheat is wanted in this market. Extracted, quiet; white, 7½c; mixed, 6½c; buckwheat, 6½c. Beeswax scarce at 30c.

H. R. WRIGHT.

INDIANAPOLIS, Nov. 7.—There is a tendency for higher prices on best grades of honey. The demand for strictly fancy white comb honey exceeds the supply. Demand for lower grades of comb honey not good. Numerous shipments

of honey arriving, but no one producer seems to have very great quantities to offer. I quote fancy white at 15@16c; No. 1 in poor demand at 12c, and amber dull at 10c. Best grade extracted brings 8@9c in 60-lb. cans; amber, slow at 5c. Beeswax, 28@30c.

WALTER S. POWDER.

DENVER, Nov. 11.—No. 1 white comb honey, per case of 24 sections, \$3.35; No. 1 light amber, \$3.00; No. 2, \$2.50@3.00. Extracted honey, 6½@7 cts. per pound. Supply is light and we could make quick sales of consignments at above figures. We pay 24c for clean, yellow beeswax delivered here.

THE COLO. HONEY-PRODUCERS' ASSN.

CINCINNATI, Nov. 17.—The nice weather holds back the demand for comb honey. Crops seem to be exceedingly short and producers in the West keep the prices high. We quote as follows: Fancy water-white and No. 1 white clover, 14@16c; No. 2, 12@14c. Extracted seems to be more plentiful, and we quote same in barrels, light amber, 5½@5¾c; in cans, ¼c more; white clover, 7@8c. Beeswax, 28@30c.

C. H. W. WEBER.

SAN FRANCISCO, Nov. 22.—White comb, 1-lb. sections, 8@9 cents; amber, 6@7c. Extracted, water-white, 4½@5c; white, 4½@4¾c; light amber, 3¾@4 cents; amber, 3@3½c; dark amber, 2½@3c. Beeswax, good to choice, light, 26@27c; dark, 25c.

Plenty of honey is now offering at the appearing quotations, but very little trading is being done, as dealers generally are of the opinion that lower prices will prevail. The quality of the receipts has been good so far this season and would indicate that the crop is quite large.

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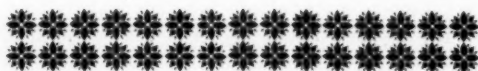
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